Bellcore
Bell Communications Research

Michael S. Slomin
Senior Attorney

June 5, 1992

Donna R. Searcy, Secretary
Federal Communications Commission
1919 M Street, N. W., Suite 222
Washington, D. C. 20554

Re: Matter of Use of N11 Codes and Other Abbreviated Dialing Arrangements, CC Docket No. 92-105

Dear Ms. Searcy,

Pursuant to the Commission's Notice of Proposed Rulemaking in the above-captioned proceeding, FCC 92-203 released May 6, 1992, on behalf of Bell Communications Research Inc. (Bellcore), as Administrator of the North American Numbering Plan, please find enclosed an original and six copies of its "Comments of Bell Communications Research Inc. (Bellcore) as Administrator of the North American Numbering Plan."

Please stamp and return one copy to confirm your receipt. Please communicate with me should you have any questions concerning this matter.

Sincerely,

Michael S. Slomin

Enclosures

No. of Copies rec'd 0+9
List A B C D E

290 W. Mt. Pleasant Avenue
Room LCC-2B336
Livingston, New Jersey 07039

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

In the Matter of	)	
	)	
The Use of N11 Codes and Other Abbreviated Dialing Arrangements	)	CC Docket No. 92-105
	)	

Comments of Bell Communications Research Inc. (Bellcore) as Administrator of the North American Numbering Plan

As the Commission is aware, the function of administering the North American Numbering Plan (NANP) was assigned to Bell Communications Research Inc. (Bellcore) in the Plan of Reorganization implementing divestiture that was entered and approved by the MFJ Court. As NANP Administrator (hereafter, NANPA), Bellcore has administered the numbering plan and related numbering resources for World Zone 1, which includes the United States, Canada and 16 Caribbean nations. In its capacity as NANPA, Bellcore offers comments in response to the Commission's Notice of Proposed Rulemaking (Notice) herein, released May 6, 1992.

N11 numbers are available for local dialing only.1/ An N11 number cannot be accessed from other areas, and therefore is not

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1/ When we discuss "N11" numbers in these comments, we intend that this discussion apply also to other potential abbreviated dialing approaches unless the context indicates otherwise.

the type of number resource that is ordinarily administered by NANPA to promote nationwide or international connectivity and interworking.

Nevertheless, there are reasons for NANPA to be concerned about use of N11 resources, even though national administration of the N11 resources has been limited (largely to standardization of 411 and 911, and to a lesser extent, 611 and 811). First, policies developed for N11 codes should not improperly undermine or impair policies and procedures that are applied to assignment and use of other NANP resources, i.e., policies that promote fairness and efficiency, and industry procedures for arriving at consensus. Second, assignment of abbreviated dialing resources should not adversely affect assignment of other NANP resources and future evolution of the NANP. And third, the Commission should consider that there may be as-yet-unidentified non-commercial "public service" uses of abbreviated dialing codes that may never be available in the future if all such codes are assigned as a result of this proceeding. The Commission should consider reserving one or more codes for dedication to such uses, lest there never again be an opportunity to create a service akin to the virtually nationwide 911.

Principles

There are important principles that underlie NANPA's activities and proposals, and that we believe should similarly underlie the policies to be applied to the numbering resources

addressed in this proceeding. They are discussed broadly in the North American Numbering Plan Administrator's Proposal On the Future of Numbering In World Zone 1 that was released by NANPA in January, 1992 for consideration by interested telecommunications service providers, vendors, users and government bodies.2/ They are summarized and applied to this proceeding below.

First, NANP resources should be administered fairly and impartially, to the mutual benefit of users and service providers in the entire World Zone 1 NANP region. On the user side, the benefits of abbreviated dialing access to commercial offerings are unclear. What is clear is that unless some N11 codes are withheld for non-commercial public service use, none will be available for this in the future. On the service provider side, NANPA is concerned that assignment of the less than eight N11 codes that are available to a very limited portion of the telecommunications sector will, under any assignment guidelines that are applied, disadvantage hundreds of other similarly placed entities that will be unable to obtain codes. We cannot conceive of any potential commercial use of N11 codes that does not involve a large multiplicity of competitors.3/ And, unless N11

2/ A copy of this report, Bellcore Letter IL-92/01-013 (Jan. 6, 1992) was included in Bellcore's January 17, 1992 Reply filing with the Commission in Petition of the National Association of Regulatory Utility Commissioners, DA 91-1307.

3/ Somewhat analogously, the industry in the past avoided an approach that could be viewed as providing advantages to a privileged few early requestors and disadvantages to large numbers of later arrivals, even though "first come, first

assignments are in fact reclaimable for non-local dialing uses (e.g., NPAs) there could be effects on the other seventeen nations in World Zone 1.

Second, NANPA works cooperatively with standards bodies, industry forums, national and international organizations, and appropriate government agencies to seek and implement consensus on NANP administrative procedures and design changes. Formal proceedings before the FCC might be considered as providing an opportunity for such consensus to arise, but NANPA is concerned that they not be viewed as a new substitute for broadbased industry consensus procedures, to be routinely applied in the future. Industry consensus procedures can address and weigh the myriad technical and efficiency factors that are relevant to numbering decisions, and can meld the needs of other nations in World Zone 1 with those of the United States without this becoming an exercise in diplomacy. Also, just because N11 codes have been available for temporary local assignment does not mean that they necessarly should be locally assigned as a policy matter. An expedited rulemaking proceeding might not provide an adequate opportunity for the entire industry to discuss potential

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serve" procedures could have been advanced as justification for the advantages enjoyed by the former. When the MFJ was being formulated, carrier identification codes were to be two digits (100 potential codes). When it appeared that there would be more than 100 entities that might seek such codes, the code set was expanded to 3 digits (1000 potential codes) to provide all users comparable opportunities.

nationwide uses of N11 codes. The consensus process, however imperfect at times, involves discussion, dialogue and compromise -- which are not normally the product of two rounds of filings with a regulatory body.

Third, NANPA seeks to ensure that code conservation techniques are employed in the assignment and utilization of NANP resources, rather than by seeking to achieve this by later reclamation. Our experience has been that once codes are assigned for specific applications it is difficult to recover those codes and discontinue their use. Witness the failure of certain industry participants to make "good faith" efforts to discontinue using excess complements of carrier identification codes, and the unwillingness to date of the government to force this result. N11 assignments might be particularly difficult to recover for nationwide assignment or other NANP uses since they might be assigned locally under different procedures, contracts and/or regulatory regimes. Should a truly nationwide application for an N11 code gain consensus across the entire telecommunications sector, it might be impossible to "clear" a code nationwide. There are already difficulties doing so today. Based on a recent survey all N11 codes are in use for some local applications across the nation.4/

4/ A recent questionnaire sent to the industry by NANPA to assist the Department of State in answering a CCITT questionnaire on a UPT prefix identified many current local uses of N11 codes. In summarizing the results in the appendix to these comments for informational purposes, NANPA

Fourth, NANPA seeks to ensure the continued availability of NANP resources for needed applications as they arise. As other NANP code sets have approached exhaustion, expansion has been provided for (for example by moving from NNX to NXX central office codes, and by moving from N0/1X to interchangeable NPAs). NANPA is concerned that there is currently no identified method for expansion of the N11 resources.

A different concern relates to the potential effect of N11 assignments on availability of NPAs prior to implementation of interchangeable NPA codes in 1995. There are currently two requests for the assignment of an NPA code prior to 1995 and only one remaining unassigned code. Experience tells us that the number of requests can change yearly, based on most recent forecasts. It is hoped that this currently projected shortfall of one NPA code can be met by recovery of the 610 code, currently assigned to Canada. A proposed swap of the 610 code for an N00 code is currently under consideration by the Canadian industry. Should it not be feasible to recover the 610 code, the assignment of either an N00 code or an N11 code, as a geographic NPA code, would be necessary. Industry consensus will be needed to determine which of the formats, N00 or N11 is most appropriate. There are proponents and opponents for either. Decisions made regarding use of N11 codes should not entirely preclude their use

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expresses no opinion on the appropriateness or desirability of the various uses described.

as geographic NPA codes.

Fifth, the NANP should be adapted to the changing requirements of the telecommunications industry, users and service providers. There are two ways to adapt the NANP to meet changing needs of users and service providers. The first is to use numbering resources for applications not originally intended, thereby forcing (or unintentionally causing) adaptation. Assignment of N11 resources to commercial information services might be viewed as an example of this. The second is to develop new resources and long-term plans, i.e. planned adaptation. Assignment of the few N11 resources that are available may meet some short-term needs, but will probably create pressure for long-term plans. If a few information service providers were to receive N11 codes, it is likely that their competitors would seek comparable capabilities if it developed that the N11 codes were a significant competitive factor.

Sixth, potential uses of abbreviated dialing for access to non-commercial "public interest" applications should be preserved. It was possible to develop 911 service virtually nationwide because of the previous N11 assignment policies; it might prove difficult or impossible to develop a comparable service in the future. The list of current uses of N11 codes in the appendix illustrates interesting applications that have not heretofore been considered for nationwide implementation, for example school information. Other potential applications could include provision of traffic information, handicapped access,

local transportation on demand.

And finally, when possible, compatibility with existing procedures and applications should be maintained to minimize subscriber confusion. For example, broad numbers of subscribers have long expected to reach directory assistance in many areas of the country by dialing 411, and they should continue to be able to do so.

Recommendations

The Commission has proposed the assignment of the very limited complement of available N11 resources (and might even be viewed as having encouraged such assignment on a temporary basis in view of footnote 1 of the Notice) presumably in full awareness of the fairness issues such assignments might raise. NANPA will accordingly not address this matter further.

We would recommend, however, that comment be sought on whether assignment of N11 codes might be restricted to entities that will use them for access to multiple information services, rather than to individual ones.5/ This would extend the benefits of abbreviated dialing beyond the less than eight entities accessible if N11 codes are assigned to each entity. In this regard, we would recommend that assignees be limited to one N11

5/ One model might be for the assignee to be a "library"-like entity. Another might be for the assignee to operate some form of gateway to information services.

code in each area. We would also recommend that the Commission encourage the industry in its informal consensus processes to work towards developing, and implementing in switches and other equipment, alternative abbreviated dialing capabilities (e.g., XX# or XXX#) to address longer-term needs.

NANPA recommends that 411 access to directory assistance remain available, ~~and that the Commission not impair the ability of the telephone companies to automate or improve directory assistance by applying "enhanced service" or other classifications to such offerings.~~ If 611 and/or 811 are to continue in use where in use today, it might be appropriate to reserve them for such use nationwide. The appendix shows extensive use of 611 and 811 in the nationwide network. Alternatively, it might be appropriate to encourage the industry to develop alternative procedures for accessing repair and business office services.

NANPA recommends against allowing an assignee to transfer an abbreviated dialing resource unless it returns it to the assigning body for reassignment under that body's "first come, first served" procedures, or it gains approval from the body of the transfer, and/or it does this pursuant to regulatory oversight. We would anticipate that these codes will be initially assigned under criteria met by the successful applicant. If the codes can then be transferred at will this could nullify any such criteria. And, the ability to sell the codes would create profits -- not to the telephone companies

that have created the facilities on which such codes are implemented, or their subscribers -- but wholly unwarranted ones for one or more assignees of the codes. If the Commission recognizes property rights in the codes, it similarly must consider telephone companies' rights in such property.

Respectfully submitted,

BELL COMMUNICATIONS RESEARCH INC.

by: 

Michael S. Slomin

Its Attorney

Bell Communications Research, Inc.
290 West Mount Pleasant Avenue
Livingston, New Jersey 07039
(201) 740-6390

June 5, 1992

N11 CODES - CURRENT UTILIZATION

- 111 Code
  - ANI response = 1
- 211 Code
  - Ringer and tone pad test = 2
  - Station ringer test = 2
  - Test = 2
  - Number announcer test = 1
  - Circuit test = 1
  - Special line access = 1
  - Local verification = 1
  - Weather = 1
  - ANI test = 1
  - Wire chief = 1
  - Access line identification = 1
  - Business office = 1
  - Dial speed test = 1
  - Subscriber carrier fault = 1
  - Voicemail access = 1
- 311 Code
  - Automatic number announcement = 38
  - Line identification = 8
  - Local number identification = 8
  - Test termination = 5
  - Silent switchman = 2
  - Dial test = 2
  - Office test number = 2
  - ANI station test = 1
  - Intercompany service code for repair service = 1
  - CNR announcement = 1
  - Trunk test = 1
  - Information = 1
  - Recorded announcement = 1
  - ANI spill = 1
  - Number calling from = 1
  - DMSANA = 1

- Testing = 1
- Repair service = 1
- Subscriber line test = 1 (+86)*

- 411 Code

  - Local directory assistance access = 105

- 511 Code

  - Office test number = 7
  - Automatic number announcement = 4 (+86)*
  - Station test = 4
  - Dial test = 3
  - Business office = 3
  - Ringer = 3
  - CDO = 2
  - Test number for 911 = 2
  - Operator intercept = 1
  - Number ID = 1
  - Circuit test = 1
  - DTMF test access = 1
  - Wire chief = 1
  - Redials 838-9000
  - Fire systems = 1
  - Dials local switch office = 1
  - ANI = 1
  - Automatic ringback = 1
  - School information =1
  - Local office number = 1
  - Repair service = 1
  - Cable pair test tone = 1

- 611 Code

  - Local repair access = 96 (+86)*
  - Business office = 6
  - Local directory number = 5
  - Access Telco office = 3
  - Office test number = 3
  - CSC = 3
  - Line identifier = 1

- Redials 838-2390 = 1
- Switch maintenance phone = 1
- POT = 1
- Rotary dial speed test = 1
- Electric repair = 1
- 911 test = 1
- Abbreviated dialing to offices = 1
- Time = 1
- Billing information = 1

• 711 Code

- Test board = 6
- Local directory number = 5
- Repair service = 5
- Office test number = 4
- Repair center = 3
- Time and temperature = 3
- Automatic number announcement calls = 3
- Wire chief = 2
- Test board = 2
- ANA test access = 1
- Routes to vacant office code = 1
- Maintenance directory number = 1
- Test cabinet access = 1
- Temperature = 1
- ANI check = 1
- Dial tone test = 1
- Revertive call = 1
- Test = 1
- Station ringer test = 1
- Automatic line identification = 1
- Line identification = 1
- Dial speed test = 1
- Dispatch = 1

• 811 Code

- Business office access = 30 (+86)*
- Repair service = 5
- Office test number = 5
- Local directory number = 4
- ANI = 1

- Calling number announcement = 1
- Voicemail = 1
- Accounting - billing and collection = 1
- POT = 1
- Revertive call = 1
- Water repair = 1
- Dial speed test line = 1
- Automatic number announcement = 1
- Local identification number = 1
- Local test board = 1
- Time = 1
- Number detection = 1
- Pay station access test = 1

- 911 Code

  - Emergency service access = 171 (+86)*
  - NEC = 3
  - PSAP = 1

  * One respondent (TDS Telecom) states that they represent 87 telephone companies